



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,305	12/11/2003	Srecko Zdravkovic	0275M-000786	9952

27572 7590 06/29/2005

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

COZART, JERMIE E

ART UNIT	PAPER NUMBER
----------	--------------

3726

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/735,305	Applicant(s) ZDRAVKOVIC ET AL.	
	Examiner Jermie Cozart	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
4a) Of the above claim(s) 1-29 and 49-69 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-48 is/are allowed.
- 6) ☒ Claim(s) 30-35 and 41 is/are rejected.
- 7) ☒ Claim(s) 36-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/04, 04/04, 03/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II, claims 30-48 in the reply filed on 5/16/05 is acknowledged. The traversal is on the ground(s) that there is no undue burden to search both inventions due invention to their overlap. This is not found persuasive for the reasons set forth in the restriction requirement mailed 4/22/05.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 307. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 30-35 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mauer et al. (6,276,050) in view of Stevenson et al. (6,802,682).

Mauer discloses a fastening system (21) comprising: a fastener; and a machine automatically operable to drive the fastener, the machine comprising: (a) a C-frame (37); (b) at least one transmission housing (not labeled) coupled to the C-frame; (c) an electric motor (29); (d) a transmission (not labeled) coupled to the motor, at least a portion of the transmission being located in the transmission housing; and (e) a punch (123) coupled to the transmission; wherein the transmission operably transmits rotary motion of the motor to linear motion of the punch to operably push the fastener. The fastening system further comprises at least one sensor (i.e. proximity sensor, load cell) coupled to the machine and a controller connected to the machine, the sensor operably sensing a fastener characteristic such as: fastener size, fastener insertion force, fastener presence in the machine, and insertion speed greater than zero. The controller automatically varies a fastener insertion feature of the machine in response to the fastener characteristic sensed. A die (35) attached to the C-frame (37), the die always being substantially aligned with the punch, the fastener being prevented from directly contacting the die, all of the die being stationary during joint creation, and a robotic arm (not labeled, fig. 2) coupled to at least one of the housing and the C-frame. See *column 3, line 41 – column 6, line 20; column 10, lines 17-61; and figures 1-3 for further clarification.*

Mauer, however, does not disclose the fastener being threaded.

Stevenson discloses providing a threaded fastener (100') in an assembly to prevent forces acting parallel to a shell axis from loosening the sheets relative to the rivet, as well as separation of the sheets. *See column 3, line 54 – column 4, line 9, and figures 9-11 for further clarification.*

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the riveting system of Mauer with a threaded fastener, in light of the teachings of Stevenson, in order to prevent forces acting parallel to a shell axis from loosening the sheets relative to the rivet, as well as separation of the sheets.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clew (2002/0166221) in view of Stevenson et al. (6,802,682).

Clew discloses a fastening system comprising: a fastener; and a machine automatically operable to drive the fastener, the machine comprising: (a) a C-frame (1); (b) at least one transmission housing (not labeled) coupled to the C-frame; (c) an electric motor (10); (d) a transmission (3) coupled to the motor, at least a portion of the transmission being located in the transmission housing; and (e) a punch (24) coupled to the transmission; wherein the transmission (3) operably transmits rotary motion of the motor to linear motion of the punch to operably push the fastener. *See page 3, paragraph [0046]- [0065], and figure 1 for further clarification.*

Clew, however, does not disclose the fastener being threaded.

Stevenson discloses providing a threaded fastener (100') in an assembly to prevent forces acting parallel to a shell axis from loosening the sheets relative to the

rivet, as well as separation of the sheets. See column 3, line 54 – column 4, line 9, and figures 9-11 for further clarification.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the fastener insertion apparatus of Clew with a threaded fastener, in light of the teachings of Stevenson, in order to prevent forces acting parallel to a shell axis from loosening the sheets relative to the rivet, as well as separation of the sheets.

Allowable Subject Matter

6. Claims 36-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 42-48 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: Regarding **claim 42**, the prior art does not teach or suggest a clinch nut comprising a cylindrically tapered end which self-pierces into the panels and diverges during installation, the nut further comprising an internally threaded body, a non-fluid powered actuator, a transmission coupling the non-fluid powered actuator to the driver, in combination with the other claimed limitations.

Conclusion

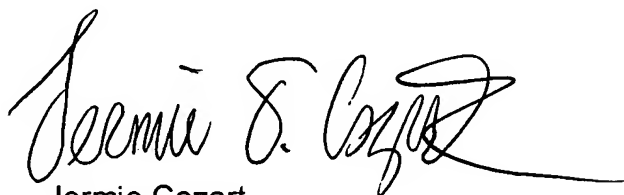
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the attached PTO-892 are cited to show devices for inserting fasteners into work-pieces.

Art Unit: 3726

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 571-272-4528. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Jermie S. Cozart". The signature is fluid and cursive, with a long horizontal stroke at the end.

Jermie Cozart
Examiner
Art Unit 3726